hands, is deeded over to the Native or Village corporations, or to the state, or any combination of the above there will be radically different impacts for the North Slope Borough. One thing is certain, if the find is large, and it is developed, the NSB will not have to worry nearly as much as they do today about a declining tax base when Prudhoe Bay's production begins to fall.

Northwest Arctic Borough

The Northwest Arctic Borough (NWAB) has a great deal in common with its northern neighbor, both culturally and geographically. Approximately 84% of the population are Inupiaq Eskimo. The NWAB consists of 10 villages with populations of 600 or fewer. The population of its regional center, Kotzebue, is 2,633 inhabitants. The borough boundaries are basically identical with the NANA region or those of the former Kobuk census area.

Economically speaking, NWAB's economy is a stark contrast to its northern neighbor's. Although they are almost identical in population, employment opportunities are roughly 60% of what they are in the North Slope Borough (excluding Prudhoe Bay). Only 52% of the adult population participates in the labor force and high unemployment plagues the economy (figure 4). The borough's income and poverty statistics also paint a picture of an unhealthy economy.

A survey conducted by the borough in February 1988 found that more than 63% of respondents were not working or did not have a job and 37% of those who had no employment had not worked for eight months. Though the Department of Labor's unemployment rates are significantly lower than the borough's, they were still five points above the statewide average in 1987. The dis-

Figure 4
Northern Region Unemployment 1980-87

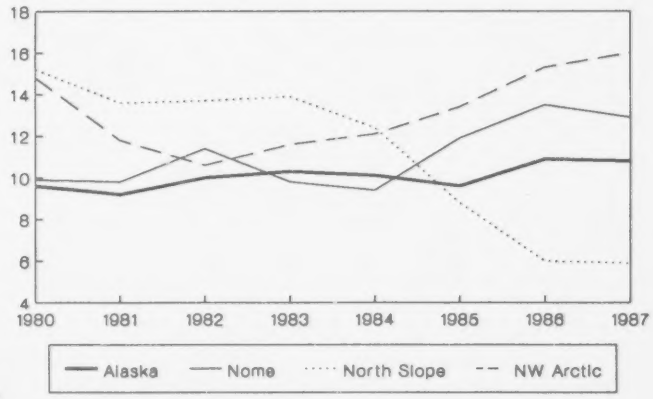


Table 4
Northwest Arctic Borough
Employment by Industry
1980-1987

	1980	1981	1982	1983	1984	1985	1986	1987
Total	1,438	1,754	1,880	1,710	1,779	1,822	1,823	1,732
Mining	*	*	*	*	*	*	*	*
Construction	84	*	64	*	14	*	*	*
Manufacturing	*	0	0	0	0	0	0	*
Trans., Comm., Util	125	151	196	195	183	120	99	153
Wholesale	0	0	0	0	0	0	0	0
Retail trade	135	178	227	206	180	188	232	209
Finance, Insur. & R.E.	14	43	39	44	76	81	69	86
Service	168	198	207	258	237	251	277	336
Total Government	883	983	1,106	928	1,048	1,130	1,104	909
Federal	218	207	141	110	122	137	151	111
State	60	52	61	82	89	93	92	93
Local	606	724	905	737	837	901	862	705
Miscellaneous	*	*	*	*	*	*	*	*

*Nondisclosable

Source: Alaska Department of Labor, ES-202 Files.

crepancy between the borough's unemployment figures and the Department of Labor's is largely explained by definitional differences. The Department of Labor's figures don't account for the discouraged worker[2] and the borough's do. Because of the area's high unemployment, the NWAB was the first region in the state to be designated as an economically distressed zone under the new local hire law provisions enacted in 1987. This designation is intended to increase residents participation in the local labor force.

Government Dominates the Economy

As in the other areas, government dominates the economy of the NWAB. Fifty-two percent of the employment is government, and a large share of the service industry's employment represents nonprofit activity that is dependent on government revenues. Tourism, a small active fishery and mining contribute to the small private sector side of the economy. Total employment trends have not been remarkable, remaining relatively unchanged since 1981. A more detailed look reveals that the service industry has broadened its share of total employment. Some of this growth came as a result of nonprofit social service agencies assuming a growing share of what were previously government functions. For example the Maniilaq Association recently took over the Indian Health Service facility from the federal government.

The Big Break

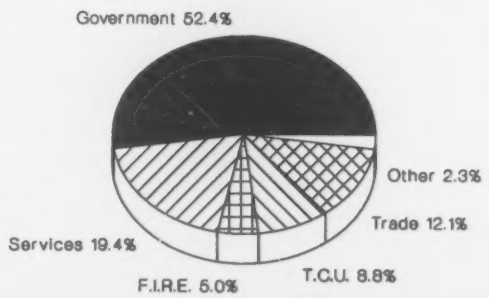
A big break in the borough's economic fortune came in 1987 when the construction of the road to the Red Dog mine began. NANA owns the Red Dog mine and Cominco will operate it. The mine will provide not only a desperately needed tax base for the borough, but it also job opportunities for local residents. Qualified borough residents will be offered the jobs first. (See *Alaska Economic Trends*, December 1987). In 1987, almost 400 people were employed at the mine site and on the 52-mile road project connecting the mine with tidewater. An equal number of workers are expected on the site this year. When the mine goes into production in 1990, it will employ roughly 400 workers. The life of the mine is projected to be 50 years.

Summary

Today, large scale resource development is taking place in the entire Northern region. Most of it is relatively recent. The potential for additional resource extraction is enormous since the Seward Peninsula is highly mineralized. The chances of finding additional enormous oil reserves on the North Slope are better than average. The development of its giant gas fields will eventually occur. Massive deposits of coal are also known to exist on the North Slope. The region's remoteness and inaccessibility have prevented the exploitation of the region's natural resource potential. But, as more sites are developed and accessibility improves, the exploitation of other deposits will become economical. Though the world mineral markets are extremely fickle, it is almost inevitable that in the near future, additional large scale resource development will take place in the region.

These developments will not solve the more immediate problems of low income and high unemployment that most of the region faces today. The region will also continue to wrestle with the dual challenge of effectively preserving the subsistence lifestyle while increasing opportunities in the cash economy. Thus far, the North Slope Borough has come the closest to providing a balance of both. The rest of the region is closely watching the experience of the North Slope Borough to see what they might learn to enhance future development.

Figure 5
Northwest Arctic Borough
Employment by Industry — 1987



Notes:

[1] U.S. Department of Interior, Minerals Management Service, *Technical Report # 120* volume 1 June 1986.

[2] A discouraged worker is a person who has dropped out of the labor force because they feel that no employment opportunities exist in that labor market. The Bureau of Labor Statistics definition of unemployment, currently in place, excludes anyone who has made no attempt to find work in the four week period up to and including the twelfth of the month.

Alaska's Employment Scene

By Brian N. Rae

June employment data hold few surprises. Employment in most sectors shows normal seasonal gains, while total employment still lags behind that of a year-ago by one percent. Unemployment is far below that of a year-ago, as the state's labor force has declined to a greater degree than employment. June's 8.7% unemployment rate is the lowest since 1981, and 2.3 percentage points below that of a year-ago. At the same time, the June U.S. unemployment rate is the lowest in 14 years.

Over the last few years, Alaska's economy has been inversely related to that of other West Coast states. Alaska's past boom times attracted many people from the lower 48, particularly the West and Northwest. Most migrants to Alaska come from Washington, Oregon, and California, in that order. The lure of well-paying jobs attracted people to Alaska in the mid-1970s and from 1981 through 1985. As illustrated in figure 1, employment and migration trends closely parallel each other. Not only were people attracted to Alaska. In many situations, in-migrants were being forced to leave areas as well.

The huge revenues derived from sales of North Slope oil in the early 1980s fueled the state's latest round of economic expansion. This came when unemployment rates in the United States, particularly the West, were higher than normal and rising (figure 2). Although the number of people moving to Alaska had little effect on the unemployment rates of other western states, it had a large impact on unemployment rates in Alaska. Even with strong economic growth between 1980 and 1985, these two years had annual average unemployment rates of 9.7%. By in-migration alone, the state's population increased by nearly 70,000 persons. Without this in-migration and the expansion of the labor force, Alaska's unemployment rate might well have fallen below the national average during the early 1980s. Alaska's economy is reaching a critical size, and there are now more mechanisms in place to avert boom-bust cycles. Undertakings such as ANWR development or construction of a gas pipeline, projects which would have

Figure 1
Alaska Migration and Employment 1974-1987

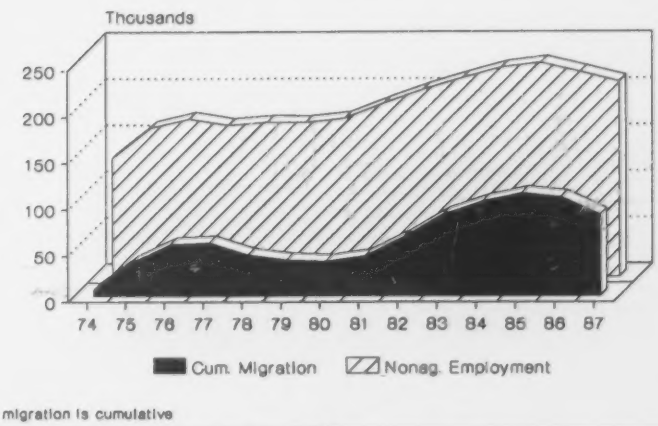
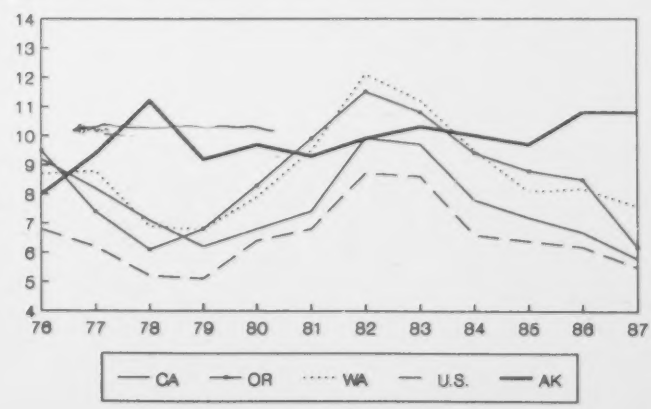


Figure 2
Annual Average Unemployment 1976-1987



caused major economic upheavals fifteen years ago, would have less impact on Alaska today. The benefits of such projects, unlike earlier ones, would be directed more towards Alaska's residents.

Pressures to migrate to Alaska have fallen. Alaska's economic downturn, and the nation's improved economic condition, have slowed in-migration. With no new economic booms in sight, and many people having already left the state, it is possible that Alaska's future unemployment rates will more closely parallel those of the nation.

If our economy is insulating itself from boom-bust cycles, then two trends should become apparent over the next several years. Because of some conditions in the Alaskan economy, such as a high percentage of seasonal employment, the state's unemployment rates will probably remain slightly higher than the national rate. If spared the economic upheavals created by booms, our unemployment rate should converge on the national average. Secondly, it will take longer than most Alaskans are accustomed to reach employment levels of even a year ago. The economy, and the state's population, grew at a rapid but unnatural pace—a "frontier economy" pace—throughout the 1970s and 1980s. An overheated economy, finally quenched, caused the loss of many jobs and people. These will not easily be replaced by normal, more mature economic growth.

Table 1
Nonagricultural Wage and Salary Employment
By Place of Work
Alaska

	p/ 6/88	r/ 5/88	6/87	Changes From: 5/88	6/87
Nonag. Wage & Salary	216,400	209,600	219,100	6,800	-2,700
Mining	9,100	9,100	9,000	0	100
Construction	10,400	9,300	11,900	1,100	-1,500
Manufacturing	16,600	13,900	15,400	2,700	1,200
Seafood Processing	9,800	7,500	8,700	2,300	1,100
Lumber & Paper Prod.	3,500	3,300	3,300	200	200
All Other Manufacturing	3,300	3,100	3,400	200	-100
Transportation	18,700	17,600	19,300	1,100	-600
Trucking & Warehousing	2,600	2,400	2,600	200	0
Water Transportation	1,100	1,000	1,200	100	-100
Air Transportation	5,800	5,400	5,700	400	100
All Other Transportation	9,200	8,800	9,800	400	-600
Trade	43,000	41,200	43,400	1,800	-400
Wholesale	7,500	7,500	7,600	0	-100
Retail	35,500	33,700	35,800	1,800	-300
Gen.Mer.& Apparel	5,000	4,700	5,100	300	-100
Food Stores	6,100	5,900	6,000	200	100
Eating & Drinking Pl.	13,300	12,300	13,700	1,000	-400
All Other Retail	11,100	10,800	11,000	300	100
Finance-Ins. & R.E.	10,900	10,700	11,400	200	-500
Services	43,500	41,100	44,100	2,400	-600
Government	64,200	66,700	64,600	-2,500	-400
Federal	18,200	17,700	18,400	500	-200
State	18,500	18,600	18,200	-100	300
Local	27,500	30,400	28,000	-2,900	-500

Prepared in cooperation with the U.S. Bureau of Labor Statistics. Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1987.

p/ Denotes Preliminary Estimates.
r/ Denotes Revised Estimates.

Industry Employment

Not surprisingly for this time of year, **seafood processing** employment showed large over-the-month gains. The late May halibut opening in Southeast carried over into June, helping to boost employment. Facilities were also gearing up for the salmon season. Early openings were mixed, with near record catches of chum to below normal catches of sockeyes. Over-the-year gains were also impressive in this industry, with employment increasing by over 12%. The only area of the state showing a yearly decline was Southeast, caused by unusually high employment during June, 1987.

The other major component of the **manufacturing** industry, **lumber and paper products**, registered over 7% employment growth for both the month and year. This helped the manufacturing sector post a monthly employment gain of over 19% and a yearly gain of 8%.

Tourism helped several sectors gain employment during June. **Service** employment showed a monthly increase, aided by hotel and motel employment increases of nearly 25%. Approximately 1,000 more jobs were available in June than in May. Still, the service sector showed an over-the-year decline in employment.

Transportation also benefited from the tourist trade. Both air transportation and local passenger transportation showed strong over-the-month gains, but the industry as a whole was unable to reach employment levels of a year ago. Big over-the-year losers were water transportation, transporta-

Table 2

Nonagricultural Wage and Salary Employment By Place of Work

Anchorage

	p/ 6/88	r/ 5/88	6/87	Changes From: 5/88	6/87
Nonag. Wage & Salary	100,300	98,300	103,650	2,000	-3,350
Mining	3,550	3,500	3,250	50	300
Construction	5,000	4,400	6,200	600	-1,200
Manufacturing	2,700	2,300	2,650	400	50
Transportation	9,600	9,200	10,150	400	-550
Trucking & Warehousing	1,500	1,450	1,700	50	-200
Water Transportation	300	350	350	-50	-50
Air Transportation	3,300	3,100	3,350	200	-50
All Other Transportation	4,500	4,300	4,750	200	-250
Trade	23,450	22,850	23,900	600	-450
Wholesale	5,450	5,350	5,600	100	-150
Retail	18,000	17,500	18,300	500	-300
Gen.Merch. & Apparel	2,400	2,300	2,450	100	-50
Food Stores	2,900	2,850	2,850	50	50
Eating & Drinking Pl.	7,000	6,750	7,350	250	-350
All Other Retail	5,700	5,600	5,650	100	50
Finance-Ins. & R.E.	7,100	7,050	7,600	50	-500
Services	24,050	23,450	24,650	600	-600
Government	24,850	25,550	25,250	-700	-400
Federal	10,450	10,400	10,450	50	0
State	6,300	6,350	6,450	-50	-150
Local	8,100	8,800	8,350	-700	-250

Anchorage-MatSu

	p/ 6/88	r/ 5/88	6/87	Changes From: 5/88	6/87
Nonag. Wage & Salary	106,900	104,650	110,500	2,250	-3,600
Mining	3,550	3,500	3,250	50	300
Construction	5,250	4,600	6,500	650	-1,250
Manufacturing	2,800	2,400	2,750	400	50
Transportation	10,300	9,850	10,800	450	-500
Trade	25,250	24,400	25,650	850	-400
Finance-Ins. & R.E.	7,550	7,500	8,050	50	-500
Services	25,200	24,500	25,800	700	-600
Government	27,000	27,900	27,700	-900	-700

Gulf Coast

	p/ 6/88	r/ 5/88	6/87	Changes From: 5/88	6/87
Nonag. Wage & Salary	21,500	19,950	21,100	1,550	400
Mining	750	750	800	0	-50
Construction	1,100	900	1,100	200	0
Manufacturing	4,550	3,750	4,250	800	300
Seafood Processing	3,950	3,150	3,650	800	300
All Other Manufacturing	600	600	600	0	0
Transportation	1,400	1,300	1,400	100	0
Trade	4,100	3,800	4,100	300	0
Wholesale	600	550	650	50	-50
Retail	3,500	3,250	3,450	250	50
Finance-Ins. & R.E.	600	550	600	50	0
Services	3,550	3,350	3,550	200	0
Government	5,450	5,550	5,300	-100	150
Federal	500	600	600	-100	-100
State	1,600	1,500	1,450	100	150
Local	3,350	3,450	3,250	-100	100

Fairbanks

	p/ 6/88	r/ 5/88	6/87	Changes From: 5/88	6/87
Nonag. Wage & Salary	26,500	25,300	26,850	1,200	-350
Mining	100	100	200	0	-100
Construction	1,750	1,500	1,900	250	-150
Manufacturing	550	500	550	50	0
Transportation	2,300	2,100	2,350	200	-50
Trucking & Warehousing	400	350	350	50	50
Air Transportation	400	350	350	50	50
All Other Transportation	1,500	1,400	1,650	100	-150
Trade	6,200	5,750	6,050	450	150
Wholesale	700	700	800	0	-100
Retail	5,500	5,050	5,250	450	250
Food Stores	850	800	700	50	150
All Other Retail	4,650	4,250	4,550	400	100
Finance-Ins. & R.E.	850	850	950	0	-100
Services	5,850	5,300	5,900	550	-50
Government	8,900	9,200	8,950	-300	-50
Federal	2,950	2,900	3,000	50	-50
State	3,500	3,650	3,400	-150	100
Local	2,450	2,650	2,550	-200	-100

Interior

	p/ 6/88	r/ 5/88	6/87	Changes From: 5/88	6/87
Nonag. Wage & Salary	30,550	29,200	31,150	1,350	-600
Mining	300	300	350	0	-50
Construction	1,950	1,650	2,100	300	-150
Manufacturing	550	550	600	0	-50
Transportation	2,600	2,400	2,750	200	-150
Trade	6,600	6,100	6,500	500	100
Finance-Ins. & R.E.	900	900	1,050	0	-150
Services	6,500	5,700	6,600	800	-100
Government	11,150	11,600	11,200	-450	-50

Southeast Alaska

	p/ 6/88	r/ 5/88	6/87	Changes From: 5/88	6/87
Nonag. Wage & Salary	30,200	29,050	30,450	1,150	-250
Construction	1,050	1,050	1,250	0	-200
Manufacturing	4,650	4,200	4,700	450	-50
Seafood Processing	1,050	850	1,300	200	-250
Lumber & Paper Prod.	3,350	3,100	3,150	250	200
All Other Manufacturing	250	250	250	0	0
Transportation	2,400	2,100	2,500	300	-100
Trade	4,850	4,550	4,950	300	-100
Wholesale	450	400	400	50	50
Retail	4,400	4,150	4,550	250	-150
Finance-Ins. R.E.	1,150	1,100	1,050	50	100
Services	4,850	4,650	5,000	200	-150
Government	11,100	11,250	10,900	-150	200
Federal	1,950	1,950	2,050	0	-100
State	5,100	5,100	4,950	0	150
Local	4,050	4,200	3,900	-150	150

tion services, communications and utilities.

The final industry showing tourism related employment gains was **trade**, specifically the retail side. Restaurants and drinking establishments benefited the most from tourism. Like most of the other sectors assisted by tourism, restaurant and eating and drinking establishment employment still showed an over-the-year decline. Preliminary hours and earnings data for June show increased hours in this industry from May.

Employment in the **construction** industry showed a normal but healthy increase between May and June. As pointed out in prior editions of *Trends*, construction has been the industry hit hardest by the economic downturn. Employment is down over 12% from that of a year ago. This is nearly 8 percentage points more than the next most hard hit industry.

Finance, insurance and real estate is that industry. Because it is a relatively stable industry with few seasonal influences, recovering lost employment might well take nearly as long as it will in construction. The insurance sector has experienced the most losses over-the-year, followed closely by banking.

Having already experienced its seasonal growth, **mining** employment held relatively steady. Although hard rock and coal mining are small components of the mining industry, they generated most of the monthly employment growth.

The only major industry group posting an over-the-month loss was **government**. This type of loss between May and June is not surprising, as school closings drop many from the government payrolls.

Regional Trends

The **Anchorage-MatSu** region experienced one of the smallest rates of over-the-month growth in the state. This is not unexpected, however, since the region relies less on its seasonal industries than do other areas of the state. The seasonal industries did show acceptable growth in the region.

Seafood processing employment, though a small percentage of total jobs for the region, increased by more than two-thirds over-the-month. Although still far below last year's levels, the region's construction employment showed good seasonal gains. Heavy construction was particularly strong, with almost a 30% increase over-the-month. Government employment registered employment losses for both the month and the year, while FIRE remains over 6% below levels of a year ago. The unemployment rate for Anchorage-MatSu fell to 8%, with 600 fewer persons unemployed than last month.

The **Interior** region showed strong growth in construction, trade, and services. These industries showed monthly employment gains of 300, 500, and 800, respectively. Losses in education employment brought down government employment over-the-month, but this movement was expected. More significant is the continued loss of employment in FIRE, which dropped 2.5% over-the-month. The region's unemployment rate was the highest in the state, but fell by 1.3% from the prior month.

The **Gulf Coast** region experienced the largest drop in unemployment over-the-month, falling to 10%. This occurred even with an increase in the labor force of 1,200, as employment increased by over 1,500. Seafood processing employment showed the largest numeric gains, and the construction industry had the largest percentage gains. Gulf Coast is the only region not experiencing an over-the-year loss in construction.

Southeast had the lowest unemployment rate in the state, at 6.8%. Both seafood processing and tourism

Table 3
Alaska Hours and Earnings for Selected Industries [1/2]

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	P/ 6/88	R/ 5/88	6/87	P/ 6/88	R/ 5/88	6/87	P/ 6/88	R/ 5/88	6/87
Mining	$1,187.42	$1,172.66	$1,125.19	50.4	48.8	48.9	$23.56	$24.03	$23.01
Construction	1,055.05	1,025.35	1,002.71	43.4	41.8	41.4	24.31	24.53	24.22
Manufacturing	513.25	458.47	488.99	45.3	36.3	42.3	11.33	12.63	11.56
Seafood Processing	395.90	294.87	334.27	47.3	32.8	42.1	8.37	8.99	7.94
Lumber & Paper Prod	632.61	632.10	662.20	42.4	42.0	43.0	14.92	15.05	15.40
Trans., Comm. & Util.	576.30	555.80	558.96	36.2	34.5	35.9	15.92	16.11	15.57
Trade	384.54	367.62	377.97	34.0	33.0	34.9	11.31	11.14	10.83
Wholesale	572.72	532.84	522.72	39.8	38.5	39.6	14.39	13.84	13.20
Retail	321.28	310.69	329.00	32.0	31.1	33.3	10.04	9.99	9.88
Finance-Ins. & R.E	380.46	387.21	380.14	34.0	33.7	33.2	11.19	11.49	11.45

Benchmark March 1987

[1] Prepared in cooperation with the Bureau of Labor Statistics US Department of Labor

[2] excludes eating and drinking establishments

AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.

helped the region attain this low unemployment rate, but the benefits were not spread evenly throughout the region. Both the Sitka and Juneau boroughs had unemployment rate increases, while Ketchikan's remained stable over-the-month. The more rural areas showed significant declines in their rates.

On the strength of both seafood processing and construction employment, the **Southwest** region's unemployment dropped to 8.1% in June. This region is one of the few to show actual employment growth over-the-year. The **Northern** region showed an over-the-month increase in its unemployment rate. Employment remained very close to that of last month, but an increase in the labor force caused the rise in the unemployment rate. This region did, however, post the largest over-the-year decline in its unemployment rate.

Conclusion

Alaska's industries could be loosely grouped into three categories. Some industries, such as manufacturing, are experiencing typical seasonal growth and show few ill effects from the economic downturn. Most other industries fill the middle ground. They were hurt by the downturn, and have not yet recovered. They have, however, stabilized at a lower level of employment and are showing typical seasonal employment patterns. The construction industry exemplifies the other extreme, severely hurt and showing little sign of recovery. Whereas the first group helped soften the economic fall experienced during the 1986-87 downturn, the second group determines the employment levels. Normal, more mature patterns of economic growth could prove quite helpful to the state's economy. They will not, however, quickly replace the jobs lost over the last two years.

Table 4
Labor Force By Region and Census Area

	Labor Force			Unemployment			Rate			Employment		
	P/ 6/88	R/ 5/88	6/87	P/ 6/88	R/ 5/88	6/87	P/ 6/88	R/ 5/88	6/87	P/ 6/88	R/ 5/88	6/87
Alaska Statewide	249,832	246,218	262,243	21,684	23,182	28,871	8.7	9.4	11.0	228,148	223,036	233,372
Anch.-MatSu Region	128,010	127,269	135,897	10,264	10,862	13,350	8.0	8.5	9.8	117,746	116,407	122,547
Anchorage Borough	113,112	112,568	119,285	8,070	8,519	10,320	7.1	7.6	8.7	105,042	104,049	108,965
MatSu Borough	14,898	14,701	16,612	2,194	2,343	3,030	14.7	15.9	18.2	12,704	12,358	13,582
Gulf Coast Region	28,762	27,565	29,439	2,864	3,224	3,788	10.0	11.7	12.9	25,898	24,341	25,651
Kenai Peninsula Bor	18,316	17,447	18,925	2,141	2,244	2,904	11.7	12.9	15.3	16,175	15,203	16,021
Kodiak Island Bor	6,361	6,108	6,401	398	504	495	6.3	8.3	7.7	5,963	5,604	5,906
Valdez-Cordova	4,085	4,010	4,113	325	476	389	8.0	11.9	9.5	3,760	3,534	3,724
Interior Region	37,611	36,906	40,221	4,263	4,652	5,971	11.3	12.6	14.8	33,348	32,254	34,250
Fairbanks North Star Br	32,351	31,602	34,446	3,538	3,734	4,854	10.9	11.8	14.1	28,813	27,868	29,592
Southeast Fairbanks	2,167	2,213	2,362	222	332	364	10.2	15.0	15.4	1,945	1,881	1,998
Yukon-Koyukuk	3,093	3,091	3,413	503	586	753	16.3	19.0	22.1	2,590	2,505	2,660
Northern Region	8,340	8,254	8,616	924	825	1,283	11.1	10.0	14.9	7,416	7,429	7,333
Nome	3,198	3,204	3,336	376	377	545	11.8	11.8	16.3	2,822	2,827	2,791
North Slope Borough	2,911	2,889	2,936	181	154	237	6.2	5.3	8.1	2,730	2,735	2,699
Northwest Arctic Bor	2,231	2,161	2,344	367	294	501	16.5	13.6	21.4	1,864	1,867	1,843
Southeast Region	34,184	33,480	35,510	2,316	2,459	3,074	6.8	7.3	8.7	31,868	31,021	32,436
Haines Borough	884	871	917	80	89	99	9.0	10.2	10.8	804	782	818
Juneau Borough	15,052	14,623	15,502	844	791	1,040	5.6	5.4	6.7	14,208	13,832	14,462
Ketchikan Gateway Br	6,747	6,570	7,093	450	440	684	6.7	6.7	9.6	6,297	6,130	6,409
Pr. of Wales-Outer Ktch	2,626	2,573	2,698	342	350	373	13.0	13.6	13.8	2,284	2,223	2,325
Sitka Borough	4,089	3,963	4,216	267	243	326	6.5	6.1	7.7	3,822	3,720	3,890
Skagway-Yakūtat-Ang	1,574	1,615	1,605	163	242	169	10.4	15.0	10.5	1,411	1,373	1,436
Wrangell-Petersburg	3,212	3,265	3,479	170	304	383	5.3	9.3	11.0	3,042	2,961	3,096
Southwest Region	12,925	12,744	12,560	1,053	1,160	1,405	8.1	9.1	11.2	11,872	11,584	11,155
Aleutian Islands	3,547	3,482	3,360	128	146	148	3.6	4.2	4.4	3,419	3,336	3,212
Bethel	5,048	4,952	4,992	493	508	712	9.8	10.3	14.3	4,555	4,444	4,280
Bristol Bay Borough	457	441	413	45	39	26	9.8	8.8	6.3	412	402	387
Dillingham	2,249	2,227	2,229	128	157	236	5.7	7.0	10.6	2,121	2,070	1,993
Wade Hampton	1,624	1,642	1,566	259	310	283	15.9	18.9	18.1	1,365	1,332	1,283

P/ = Preliminary R/ = Revised 1987 Benchmark

Federal guidelines require the use of unrounded labor force data, adjusted to be consistent with the Current Population Survey (CPS) in formulas used to allocate federal funds. Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor; because Alaska's CPS sample size is inadequate to accurately indicate monthly changes in level. The sampling errors are random in nature; meaning that the unemployment rates, in any given month, are as likely to be high as frequently as they are low. The official definitions of unemployment, currently in place, exclude anyone who has made no attempt to find work in the four week period up to and including the week that includes the twelfth of each month. Most economists feel that Alaska's rural localities have proportionately more of these discouraged workers

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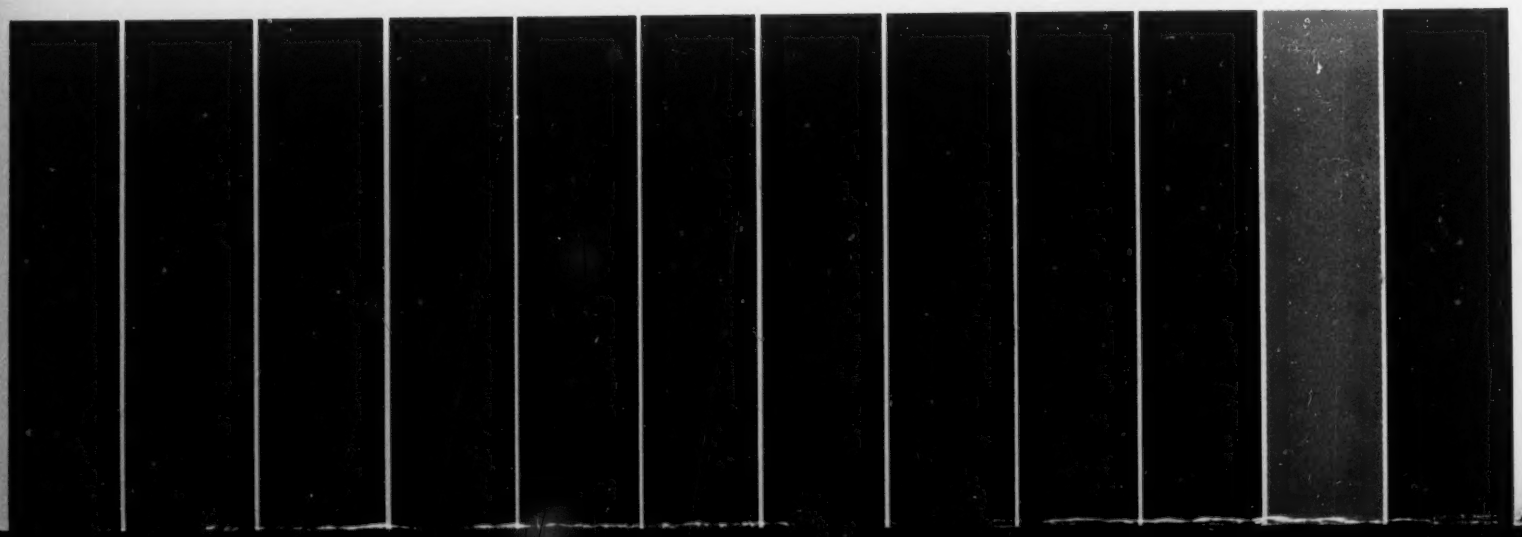

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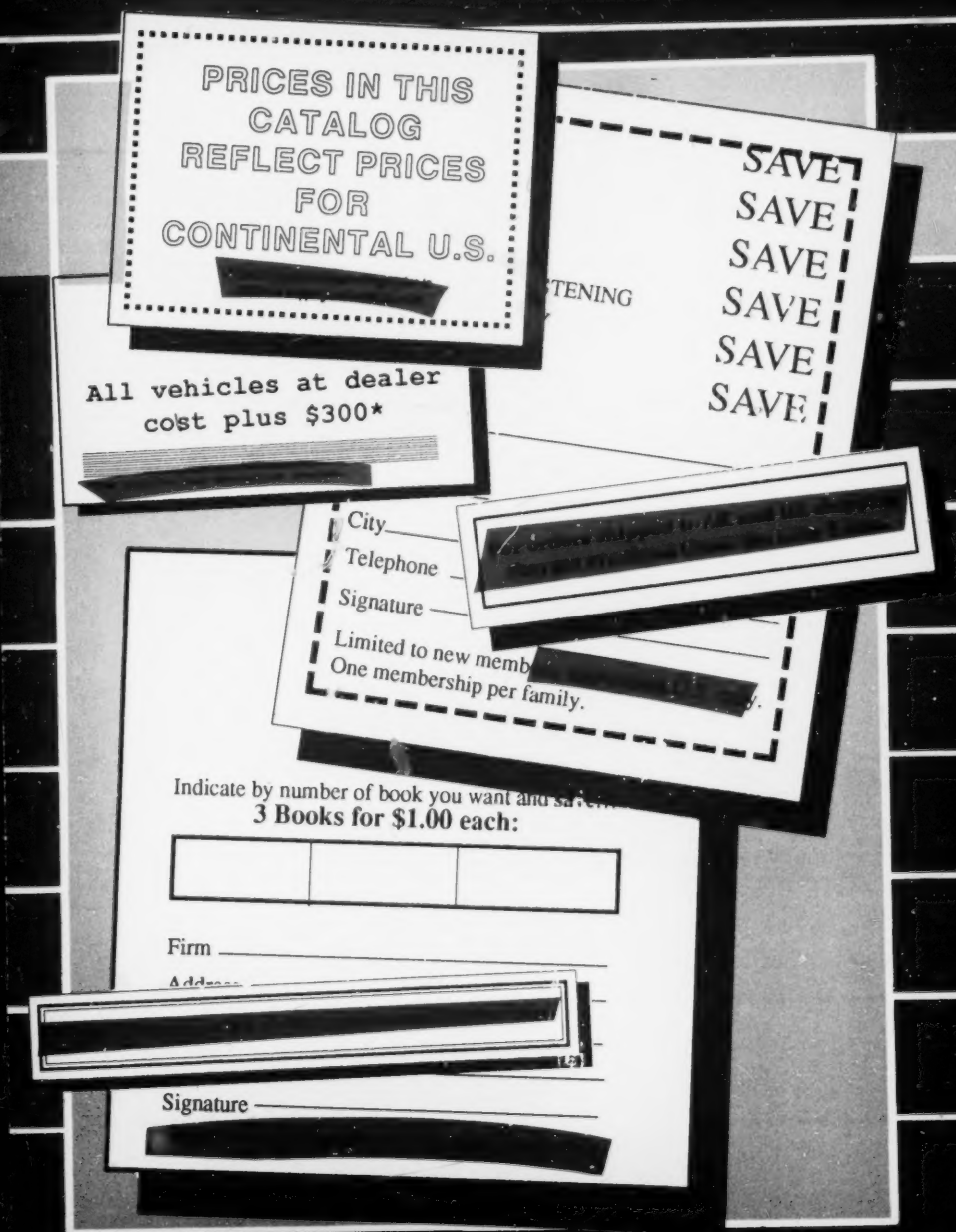
ALASKA ECONOMIC TRENDS



September 1988

Cost of Living Indicators

Alaska's Income Measures

Alaska's Employment Scene

Alaska Economic Trends

***Steve Cowper*, Governor, State of Alaska**

***Jim Sampson*, Commissioner Department of Labor**

***Frank Spargo*, Director Administrative Services**

***Chuck Caldwell*, Chief Research and Analysis**
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The following notes pertain to Non-agricultural Wage and Salary Employment Tables:

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark date March 1987.

P/ Denotes preliminary estimates
R/ Denotes revised estimates

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We welcome contributions on curent economic issues from our readers. For a copy of our editorial policy contact John Boucher, Editor, Alaska Economic Trends, Alaska Department of Labor, P.O. Box 25501, Juneau, Alaska 99802-5501.

Cost of Living Indicators

By James Wilson and Brian N. Rae

At first glance, quantifying cost of living differences between localities seems an easy task. Most persons could visit a community, comparison shop for the products and services they use regularly, collect information on housing costs, and determine a cost of living differential for the two areas. Although meeting the needs of that particular person, this comparison would be less than ideal for others with different consumption patterns. Attempting to find cost of living differences for an "average" household is like stating that the average family size is 3.21 persons. The figures are defensible, but one would be hard pressed to find this average family.

This problem is amplified when comparing areas with uniquely different consumption patterns - which area is to act as a standard, to which others are compared? Rural areas have characteristics which must be taken into account when comparing them with urban areas. Subsistence activities, whether a small garden in the suburbs or whaling and hunting in rural Alaska, impact the cost of living. What monetary value is applied to these activities? As of yet, no widely accepted method of adjusting the cost of living indicators for subsistence activities has been proposed.

Only Boston and New York have statistically significant higher indexes than the three Alaska cities.

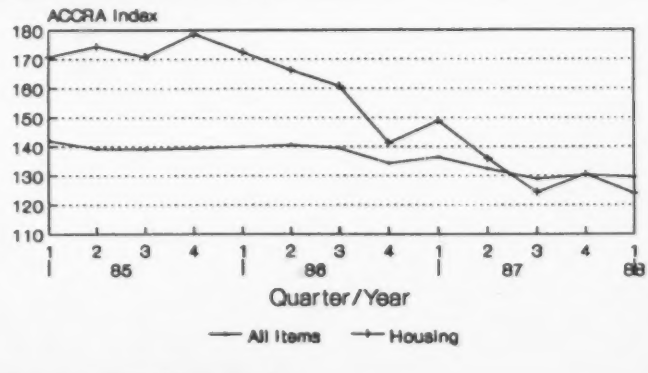
Some persons emphasize the living component in the cost of living index. What compensation is demanded for lack of certain amenities, whether unspoiled wilderness or live theater and gourmet restaurants? By example, Bethel and Los Angeles offer unique, but vastly different, recreational opportunities for their residents. For the person who enjoys their current surroundings, relocation to the other area would impose a cost which is not easily measured.

All cost of living surveys rely on the creation of a market basket of goods and services, designed to reflect the consumption patterns of the targeted population. In the opening example where one computes their personal cost of living differentials, the market basket is defined by the individual. Any deviation from this personal market basket lessens its usefulness for this person.

Because of these and other limitations, certain steps have been taken by organizations creating cost of living indexes in an attempt to alleviate these problems. Many surveys, such as the Consumer Price Index, American Chamber of Commerce Research Association, and the Runzheimer survey, look only at urban areas. Still, some areas are more urban than others, and offer different recreational opportunities and hardships. All the surveys make clear their assumptions and targeted population. The Cost of Food for a Week survey computes costs for different family sizes and at "low cost", "thrifty", "moderate", and "liberal" expenditure levels. The data presented here are the "low cost" figures.

Comparisons between communities are

Figure 1
ACCRA All Item & Housing Indexes -Anchorage 1/85 to 1/88 by quarter



1/88 data unavailable. Data presented is average of two closest quarters.

The ACCRA housing index shows that nearly 20 cities studied have housing costs higher than Alaska.

not the only important cost of living measures. The most used cost of living indicator, the Consumer Price Index, makes no attempt to quantify differences between localities, looking instead at movements within a locality over time. The CPI is often used to adjust wage and salary payments and government disbursements. Approaching a different problem, surveys like those conducted by Runzheimer International are used to adjust payments after a geographic relocation, making a point-in-time comparison between places.

SURVEYS MAKING PLACE-TO-PLACE COMPARISONS

ACCRA Inter-city Cost of Living Index

The American Chamber of Commerce Researchers Association (ACCRA) produces a quarterly report comparing relative price levels for goods and services for roughly 250 cities in the United States. In each city in the study, a standardized list of 59 items is priced during a set period of time. The items priced in each community are intended to represent the spending patterns of a household headed by a mid-management professional. After the pricing is finished, items are aggregated by category and the index numbers are produced. The all-cities average for the index is always 100 for each reporting period.

The ACCRA index is computed based on a standardized shopping list of goods and services. Because of the limited sample of items priced, however, differences in the index of three or less (such as 129 vs 130) are statistically insignificant. Differences in the index greater than three can be considered to show an actual cost of living difference. Percentage differences, measured by the ACCRA

Table 1
ACCRA Inter-City Cost of Living Index
First Quarter 1988
Ranking of 20 Highest Index Cities

City	Index	Total Grocery	Housing	Utilities	Transportation	Health	Miscellaneous
Boston, MA	157.6	114.1	288.5	129.8	111.0	147.4	119.0
New York, NY	154.6	110.6	242.2	191.7	114.8	140.0	122.4
FAIRBANKS, AK	130.9	130.6	127.7	124.5	123.9	191.4	124.7
Washington DC	130.8	108.8	186.2	104.8	114.9	150.6	114.6
JUNEAU, AK	129.7	127.4	125.3	119.7	124.1	196.4	124.9
ANCHORAGE, AK	129.5	136.7	123.9	107.8	116.7	188.4	129.4
Philadelphia, PA	126.5	113.2	139.2	164.6	109.0	139.8	115.3
Naperville, IL	125.4	106.4	171.8	111.9	116.3	113.7	113.6
Manchester, NH	123.6	101.0	169.9	127.0	109.5	113.7	109.8
Hartford, CT	123.3	108.9	147.0	129.3	109.2	134.1	115.5
San Diego, CA	121.0	100.0	180.0	78.0	125.9	119.2	103.7
Fitchburg-Leominster, MA	120.6	102.3	163.2	135.5	111.6	105.9	101.4
Orange County, CA	119.6	91.5	178.2	74.4	112.8	133.8	108.8
San Jose, CA	117.9	101.8	171.9	70.6	114.3	134.6	102.6
Los Angeles, CA	117.0	91.5	168.6	74.4	108.1	127.3	110.8
Temecula, CA	115.1	97.8	149.8	97.6	121.2	120.0	102.0
Palm Springs, CA	115.0	97.9	144.5	95.5	106.5	130.3	110.3
Wilmington, DE	113.7	109.6	134.5	111.8	106.5	102.8	107.2
Scottsdale, AZ	113.1	104.3	129.1	114.6	108.2	117.6	106.7
West Palm Beach, FL	112.4	99.9	111.9	128.9	122.1	113.6	109.2
Ranking of Alaska Cities by Category							
Fairbanks, AK	3	2	20	19	3	2	3
Juneau, AK	5	3	21	26	2	1	2
Anchorage, AK	6	1	22	68	8	3	1

Source: Inter-City Cost of Living Index, First Quarter 1988, American Chamber of Commerce Researchers Association

index, are only a reasonable indication and not a precise measure of the extent of any difference. No attempt is made to include state or local taxes in the data although it is realized that taxes are a part of the cost of living.

Three Alaskan cities are included in the quarterly ACCRA data. These are Anchorage, Fairbanks, and Juneau. According to the latest available numbers (1st quarter 1988) the three Alaska cities have the same cost of living levels (remembering that index differences less than three are insignificant). The Alaska cities' cost of living are roughly 30% higher than the all-cities average. Only Boston and New York have statistically significant higher indexes than the three Alaska cities.

Alaska's three major cities lead the nation for three components of the ACCRA index, groceries, health care, and miscellaneous goods and services (tables 1 & 2). Only one city, San Diego, had higher transportation costs than Fairbanks or Juneau. Housing costs have always been thought to be exceptionally high in Alaska. The ACCRA housing index shows that nearly 20 cities studied have housing costs higher than Alaska. This has not always been the case. As illustrated in Figure 1, the housing index for Anchorage was much higher than the all items index until the end of 1986. At that time, housing costs came down and dropped below the all items levels during the end of 1987. The lowest rankings for Alaska's cities were in the ACCRA utilities cost index. Table 3 shows a sample of ACCRA participant cities, with surveyed costs for selected items.

The ACCRA index measures the difference in cost of living between a specific city and the all-cities average at one point in time. The ACCRA index does not measure changes within a city

The ACCRA survey shows no significant difference in the cost of living among Alaska's larger cities.

Table 2
ACCRA Inter-City Cost of Living Index
(First Quarter 1988)

City	All Items Index	Grocery Items	Housing	Utilities	Transportation	Health Care	Miscellaneous Goods & Services
West							
ANCHORAGE, AK	129.5	136.7	123.9	107.8	116.7	188.4	129.4
FAIRBANKS, AK	130.9	130.6	127.7	124.5	123.9	191.4	124.7
JUNEAU, AK	129.7	127.4	125.3	119.7	124.1	196.4	124.9
Salt Lake City, UT	98.3	93.5	89.4	95.8	101.4	103.1	105.9
San Diego, CA	121.0	100.0	180.0	78.0	125.9	119.2	103.7
Seattle, WA	109.1	114.8	106.9	62.4	118.2	147.3	11.8
Southwest							
Albuquerque, NM	101.1	95.2	107.5	92.2	111.4	104.6	97.7
Dallas, TX	105.8	106.9	105.0	109.8	114.3	112.7	99.0
Phoenix, AZ	103.2	100.1	105.4	88.6	102.8	124.0	104.1
Midwest							
Saint Paul, MN	104.8	96.1	110.1	112.1	114.1	108.5	98.2
Omaha, NE	92.9	91.3	93.8	78.9	100.9	91.7	95.2
Saint Louis, MO	99.4	98.1	96.7	104.3	101.0	101.9	99.3
Southeast							
Atlanta, GA	108.6	96.8	122.0	117.1	98.2	120.0	104.0
Birmingham, AL	98.7	101.0	94.9	111.0	93.5	92.1	99.3
Louisville, KY	96.1	97.0	90.9	97.3	96.0	100.6	98.0
Atlantic/New England							
Baltimore, MD	104.1	99.2	109.3	104.3	101.8	109.6	102.5
Boston, MA	157.6	114.1	288.5	129.8	111.0	147.4	119.0
New York, NY	154.6	110.6	242.2	191.7	114.8	140.0	122.4
Philadelphia, PA	126.5	113.2	139.2	164.6	109.0	139.8	115.3

Source: Inter-City Cost of Living Index.(256 Cities) 1st Quarter 1988.
American Chamber of Commerce Researchers Accociations.